

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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TABLE NO: _____

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2017/2018

TIS2351 – HUMAN COMPUTER INTERACTION

(All sections / Groups)

4th JUNE 2018
2.30 PM – 4.30 PM
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of **14 pages with 2 Sections only**.
2. Attempt ALL questions in **PART A** and **choose 5 questions only from PART B**.
The distribution of the marks for each question is given.
3. Please write all your answers in the answer box associated with each question in this question paper.

PART A – MULTIPLE CHOICE QUESTIONS (15 MARKS).

Write down your answer in the answer box provided.

Answer

- Q1) A car rental website does not offer users the opportunity to cancel a reservation. An analysis of the context of use shows that users need this function. Which **ONE** usability element is violated by this website?

- A) Accessibility.
- B) Completeness.
- C) Efficiency.
- D) Effectiveness.

- Q2) Alice and Bob have a passion for the theatre. For Bob's birthday, Alice decides to buy them both theatre tickets. She goes online to find and book tickets for a production that she thinks they will both enjoy. After the performance, Alice talks to Bob about the whole experience.

The online ads that attracted Alice to the website claimed "Buy your tickets in under 60 seconds! Guaranteed!" It took Alice about 5 minutes to buy her tickets. "I couldn't work out how to select my tickets - that made me feel stupid", Alice explains to Bob.

Which of the following statements about Alice's user experience of the website is correct?

- i. Alice thought the website looked attractive.
- ii. Once she had selected the tickets, the checkout process seemed easy.
- iii. When Alice and Bob arrived at the theatre, they were told that their printed tickets were not valid; they argued with the usher for ten minutes before someone in the box office confirmed their tickets were genuine and they were allowed in.
- iv. Alice pre-ordered their interval drinks on the website, as they were offering a 2-for-1 deal. When she went to collect the drinks, the barman had no record of her order.
- v. The description of the credit card transaction that appeared on Alice's bank account was unintelligible; Alice was only able to work out what the transaction was because she recognised the amount.

- A) All statements i to vi affect the user experience.
- B) Only statements ii and iii affect the user experience.
- C) Only statements iii affects the user experience.
- D) All statements except vi affect the user experience.

Continued...

Answer

Q3) Which of the following statements affect the user experience of an airline's website, but not its usability?

- i. The graphics on the website are attractive.
- ii. Luggage costs are hidden until users have entered their names.
- iii. It is possible to cancel a ticket and get part of the fare refunded but all users struggled to find out how to get a refund.
- iv. Users consider the fares shown on the website to be quite high.
- v. The airport search is not error tolerant. For example, a search for 'Strassbourg' does not suggest 'Strasbourg'.
- vi. After the flight, users are annoyed by unsolicited marketing emails from the airline.

- A) All statements i to vi affect the user experience.
- B) Only statements s ii and iii affect the user experience.
- C) Only statements iv and vi affects the user experience.
- D) All statements except vi affect the user experience.

Q4) Which of the following components are parts of the user interface of a car for the driver of the car?

Accelerator
Number plate
Gear stick
Bumper
Rear-view mirror
Brake disc

- A) All of the components.
- B) Only accelerator, number plates and gear stick.
- C) Only accelerator, gear stick and rear-view mirror.
- D) Only number plate, bumper and brake disc.

Continued...

Answer

Q5) Which of the following statements are considered stakeholders but NOT users of a car rental website?

- i. A trainer who is teaching staff at a call center how to use the car rental website.
- ii. A call center employee who is using the car rental website to reserve cars on behalf of a customer.
- iii. A designer who is responsible for the user interface design of the car rental website.
- iv. An accounts administrator who receives an email invoice for a reservation from the car rental website.
- v. A customer who contacts a call center employee and asks them to reserve a car for them on the car rental website.
- vi. A marketing executive who is running a "10% off car insurance" promotion on the car reservation website, for all users who reserve a car directly through the website.

- A) All of the above are stakeholders.
- B) Only i and ii are stakeholders.
- C) Only iii and vi are stakeholders.
- D) Only v and vi are stakeholders.

Q6) A colleague is planning interviews with users of a restaurant review system. Among other questions, their interview checklist includes the question:

How do you choose a restaurant?

Which of the following terms best characterize this interview question?

- A) Closed and formative.
- B) Closed and open.
- C) Open and neutral.
- D) Open and summative.

Continued...

Answer

- Q7) Which ONE of the terms below best characterizes the following description?

Elena Montgomery, Human Resources Coordinator, Fluid Pharmaceuticals. Elena is 35 years old. She shares an apartment with her boyfriend of 4 years - they have no children. Her favorite pastimes are dancing tango and preparing wonderful tapas. She speaks conversational Spanish. Elena spends most of her day processing forms that are needed to hire, transfer, or discharge employees in the Marketing department. If something is incomplete or unclear, she takes the time she needs to find the answer. She is an expert in all relevant forms and procedures. Elena's goals: Advance in HR, excellence through accuracy, helpfulness does not fall behind.

- A) Prototype.
- B) Persona.
- C) Use scenario.
- D) User group.

- Q8) Which ONE of the terms below best describes the following statement?

25 users who have used the car rental website at least twice before must be able to rent a car at Frankfurt Airport (Germany) for two days starting tomorrow at 09.00. Users must complete the task in under 5 minutes.

- A) Low-fidelity prototype requirement.
- B) Use scenario.
- C) Quantitative user requirement.
- D) Qualitative user requirement.

Continued...

Answer

- Q9) Which ONE of the following methods is most useful in helping to develop the navigation structure of a new website?
- A) Contextual interview.
 - B) Heuristic evaluation of a low-fidelity prototype.
 - C) Heuristic evaluation of a high-fidelity prototype.
 - D) Storyboard.

- Q10) Which ONE of the following statements best describes the term "mental model"?
- A) A description of a fictitious but realistic user and what they intend to do when using an interactive system.
 - B) A description of the subtasks within a task that have to be carried out in order to reach the user's goals.
 - C) A person's thought process about how an interactive system works.
 - D) A low-cost, simple model of a design or concept used to gather feedback from users and other stakeholders during the early stages of design.

- Q11) You have been asked to conduct a usability test of a car rental website.
- Which ONE of the following is NOT an appropriate task for the usability test?
- A) Find a phone number that you can call to talk to someone about your rental contract.
 - B) Tell me what you think of the website's home page.
 - C) Rent a car that meets your needs from a location and for a period that suits you and your budget.
 - D) Rent a compact car from London Heathrow Airport. You need to collect the car tomorrow morning at 9 and return it to the same location, 4 days later at noon.

Continued...

Answer

Q12) Which ONE of the following statements best characterizes a usability inspection?

- A) A meeting where designers brainstorm ideas for a new interactive system.
- B) An evaluation of an interactive system where experts identify potential usability problems.
- C) A focused discussion where an inspector leads a group of participants through a set of questions on a particular topic.
- D) An evaluation that involves representative users performing specific tasks with the interactive system to enable identification of usability problems.

Q13) You are conducting a heuristic evaluation of a new car rental website. Which ONE of the following comments is NOT appropriate for this evaluation?

- A) "A 'Cancel reservation' button is missing on the home page".
- B) "The animated ads on the right-hand side of the home page annoyed and distracted me".
- C) "The rental prices are too high".
- D) "I found it difficult to determine the total costs of a rental".

Q14) What does "user experience" mean?

- A) Extent to which an interactive system can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.
- B) Usability with particular emphasis on satisfaction based on the appearance and attractiveness of the interactive system.
- C) Usability and helpfulness from support of the interactive system – that is, documentation, help, telephone support, etc.
- D) A person's perceptions and responses resulting from the use or anticipated use of an interactive system.

Continued...

Answer

Q15) Some users of a website have cognitive or physical impairments. Which ONE of the following activities does NOT improve the accessibility of the website?

- A) Usability test of the website with people with limited eye-sight.
- B) Design the website so users can easily change the font size.
- C) Offer visible and constructive error messages.
- D) Support screen-readers. A screen-reader is a software tool that can read display text aloud.

Continued...

PART B - STRUCTURED (25 MARKS)

Choose 5 from 6 questions available.

Write down your answer in the answer box provided.

Question 1. [5 marks]

Discuss the meaning of Interaction Design based on the lecture and FOUR (4) types of interactions.

Your answer

Continued...

Question 2. [5 marks]

Discuss FIVE ways of analyzing Distributed Cognition.

Your answer

Continued...

Question 3. [5 marks]

Explain how a scenario and persona are associated with each other. You may need to support your answer with a drawing.

Your answer



Continued...

Question 4. [5 marks]

Explain how the following THREE menus design i.e. flat menu, expanding menu and contextual menu are different from each other in terms of usage. You may need to support your answer with drawings.

Your answer

Continued...

Question 5. [5 marks]

Hospital Putrajaya has submitted a request to develop an innovative device for diabetes sufferers for help them record and monitor blood sugar levels for their patients. There are some products in the market, but they tend to be a bit large and unwieldy. Many diabetes sufferers still rely on the market manual recording and monitoring methods involving a ritual with needle or needle-like device, some chemicals and written or visual scale. Construct an informed consent form and a set of questionnaire using THREE different questions and response formats to gather the user requirements data from your respondents.

Your answer**Continued...**

Question 6. [5 marks]

Tanjung Golden Village has submitted a request to develop a mobile app that is able to provide a secure, faster and easier way to purchase movie tickets with options to view movies showing in favorite cinemas and hall types. Movie goers are able to tap the movie's poster to access instant movie details, watch the latest trailers and it takes one click to purchase tickets in your preferred cinema. Other useful features include movie show times' reminder, purchase history with QR Code ticket, driving direction and social sharing, and announcements push notification. Construct some key requirements of the new mobile app from each of the FIVE categories; functional, data, environmental, usability goals and user experience goals.

Your answer**End of Page**